AFA

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Docket No: Q55464

Peter Paul Camille DE SCHRIJVER, et al.

Appln. No.: 09/384,422

Group Art Unit: 2667

Confirmation No.: 7818

Examiner: Thai D. HOANG

Filed: August 27, 1999

For:

METHOD FOR TRANSPORTING DATA, A RELATED DATA TRANSMITTING

ELEMENT AND A DATA RECEIVING ELEMENT

SUBMISSION OF APPEAL BRIEF

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. The USPTO is directed and authorized to charge \$170.00 (\$500-\$330), and any other required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

The Appeal Brief Fee of \$330.00 has been paid on November 13, 2003. Since the Appeal of November 13, 2003 never reached the Board of Patent Appeals and Interferences as the prosecution was reopened by the Examiner (Non-Final Office Action was mailed on February 24, 2004), Applicant only submits the difference between the current Appeal Brief fee (\$500.00) and the previously paid Appeal Brief Fee (\$330.00). See MPEP § 1208.02 "[w]hether appellant elects to continue prosecution or to request reinstatement of the appeal, if prosecution

SUBMISSION OF APPEAL BRIEF

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

was reopened prior to a decision on the merits by the Board of Patent Appeals and Interferences, the fee paid for the notice of appeal, appeal brief, and request for oral hearing (if applicable) will be applied to a later appeal on the same application.").

A duplicate copy of this paper is attached.

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

washington office 23373 customer number

Date: October 31, 2005

Respectfully submitted,

Nataliya Dvorson

Registration No. 56,616

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Docket No: Q55464

Peter Paul Camille DE SCHRIJVER, et al.

Appln. No.: 09/384,422

Group Art Unit: 2667

Confirmation No.: 7818

Examiner: Thai D. HOANG

Filed: August 27, 1999

For:

METHOD FOR TRANSPORTING DATA, A RELATED DATA TRANSMITTING

ELEMENT AND A DATA RECEIVING ELEMENT

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

Table of Contents

I.	REAL PARTY IN INTEREST	2
II.	RELATED APPEALS AND INTERFERENCES	3
III.	STATUS OF CLAIMS	4
IV.	STATUS OF AMENDMENTS	5
V.	SUMMARY OF THE CLAIMED SUBJECT MATTER	6
VI.	GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	8
VII.	ARGUMENT	9
	CONCLUSION	
CLAIN	MS APPENDIX	. 22
EVIDI	ENCE APPENDIX:	. 29
RELA	TED PROCEEDINGS APPENDIX	. 30

Adjustment date: 11/01/2005<u>- \$7E</u>NDIE1 11/14/2003 HDEMESS1 00000025 09384422 01 <u>FC:1</u>402 -330.00 DF

11/01/2005 SZEWDIE1 00000128 194880 09384422

01 FC:1402

170.00 DA

330.00 OP

U.S. Appln. No. 09/384,422 Attorney Docket No.: Q55464

I. REAL PARTY IN INTEREST

The real party in interest is ALCATEL, by virtue of an assignment executed by Peter Paul Camille De Schrijver, Yves T'Joens, and Carmelo Zaccone (Appellant, hereafter), on August 20, 1999, and recorded by the Assignment Branch of the U.S. Patent and Trademark Office on August 27, 1999 (at Reel 010202, Frame 0271).

U.S. Appln. No. 09/384,422 Attorney Docket No.: Q55464

II. RELATED APPEALS AND INTERFERENCES

To the knowledge and belief of Appellant, the Assignee, and the undersigned, there are no other appeals or interferences before the Board of Appeals and Interferences that will directly affect or be affected by the Board's decision in the instant Appeal.

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

III. STATUS OF CLAIMS

Claims 3-16 are all the claims pending in the application.

Claims 3, 5-7, 9-14, and 16 stand rejected for the third time under 35 U.S.C. §102(e) as being anticipated by Chuah et al. (USP 6,519,254), hereinafter "Chuah" and claim 4 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chuah. Claim 8 is allowed and claim 15 is objected to for being dependent upon a rejected independent claim.

No other grounds of rejection or objection currently are pending. This appeal is directed to the rejected claims 3-7, 9-14, and 16.

IV. STATUS OF AMENDMENTS

With the filing of this Brief, all Amendments have been entered and considered by the Examiner.

The application was originally filed with claims 1-10.

In response to the non-final Office Action, Appellant filed an Amendment under 37 C.F.R. § 1.111 on March 4, 2003. In this Amendment, claims 1 and 2 were canceled and substituted with new claims 11 and 12; in addition, claims 3-7 and 9-10 were amended.

In response to the final Office Action, Appellant filed a Response under 37 C.F.R. § 1.116 on August 15, 2003, making no amendments to the claims, and then appealed this rejection by filing an Appeal Brief filed on November 13, 2003. Based on the arguments presented in the Appeal Brief, the Examiner reopened prosecution.

In response to the non-final Office Action, Appellant filed an Amendment under 37 C.F.R. § 1.111 on May 24, 2004. In this Amendment, claim 8 was amended.

In response to the final Office Action, Appellant filed an Amendment under 37 C.F.R. § 1.116 on November 10, 2004. Applicant amended claims 3, 5, 6, 7, 9, and 10, rewrote claim 8 into its independent form, and added claims 13-16. Appellant filed a Request for Continued Examination to force the entry of this Amendment on February 11, 2005.

In response, the Examiner issued a non-final Office Action rejecting the claims on the same grounds. Appellant filed a Notice of Appeal on August 29, 2005 undertaking this Appeal.

The Appendix included with this Brief, setting forth the claims involved in the appeal, reflects the claim changes made in the above-identified Amendments.

Attorney Docket No.: Q55464

SUMMARY OF THE CLAIMED SUBJECT MATTER

Appellant's invention is a method and a system for data communication. Specifically, a data transmitting network element (hereinafter "DTE") sends data to a data receiving network element (hereinafter "DRE") (Fig. 1; specification, page 3, lines 17 to 18). This DTE is a user terminal such as a personal computer (PC) and there might be a plurality of such user-terminals (specification, page 3, lines 15-16 and lines 23 to 25). The DRE may be a network access server situated at the edge of the internet network INNW (Fig. 1; specification, page 3, lines 26 to 28). This DRE provides the DTE access to the internet network INNW (specification, page 3, lines 28 to 29). In addition, the DRE might police the data sent from DTE to the DRE (specification, page 3, line 29 to page 4, line 2).

The DTE is described as including: data sending means ("DSM"); a service level requesting means ("SL R M") used for sending a request for a predetermined level service to the DRE, using Internet Protocol Control Protocol (hereinafter "IPCP"); a service level propose receiving means ("SLP R M") to receive an IPCP proposal and to notify the DSM of the proposal; and a service level propose renegotiating means ("SLP RN M") checks if the proposed level is satisfactory and if not, renegotiates the service level (Fig.2; specification, page 4, lines 5 to 18).

The DRE comprises data receiving means ("DRM") to receive data from DTE, service level request reception means ("SL Re M") to receive service level specification request using IPCP (Fig. 2; specification, page 4, line 29 to page 5, line 4). In addition, DRE has a negotiating and processing means ("SL NP M") which determines the level based on at least one

(specification, page 3, line 26 to page 4, line 4).

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

predetermined criteria and formulates a proposal sent to DTE using service level proposal sending means ("SLP_S_M") of the DRE (Fig. 2; specification, page 5, lines 4 to 9). In short, the DTE sends data to the DRE for subsequent transmission over another network such as the Internet (Fig. 1; specification, page 3, lines 13 to 29). The DRE is an edge node of the another network (Fig. 1; specification, page 3, lines 26 to 28). The service level negotiated between the DTE and DRE (using messages sent between the two on the first network) is a level of service relating to the sending of data over a different (second) network, viz., the INNW

U.S. Appln. No. 09/384,422 Attorney Docket No.: Q55464

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Two issues are on appeal.

The first issue is whether claims 3, 5-7, 9-14, and 16 are improperly rejected under 35 U.S.C. §102(e) as being anticipated by Chuah.

The second issue is whether claim 4 is improperly rejected under 35 U.S.C. §103(a) as being unpatentable over Chuah.

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

VII. ARGUMENT

Issue 1: 35 U.S.C. § 102.

Claims 3, 5-7, 9-14, and 16 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,519,254 to Chuah et al. (hereinafter "Chuah").

A. Legal Standard

To be an "anticipation" rejection under 35 U.S.C. § 102, the reference must teach every element and recitation of the Appellant's claims. Rejections under 35 U.S.C. § 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art. Thus, the reference must clearly and unequivocally disclose every element and recitation of the claimed invention. MPEP § 2131.

B. Exemplary Features of the Independent Claim 3

Independent claim 3, among a number of unique features, not taught by the prior art, recites: a data transmitting element comprising:

service level requesting means for generating an Internet Protocol Control Protocol (IPCP) message, for sending to said DRE, requesting a service level for communicating said data of said DTE over said second communications network; and service level proposal receiving means: adapted to receive from said DRE an IPCP message indicating a proposed service level that said DRE can provide for communicating said data of said DTE over said second communications network, and notifying said DSM of said received service level proposal said DRE receives said data of the DTE over said first communication network and

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

transmits said data of the DTE in said

second communications network.

In the exemplary, non-limiting embodiment of the present invention a data transmitting element (e.g., a personal computer) sends data to the data receiving element (e.g., access network server) so that the data can be transmitted over another network, e.g., the internet. When the DTE sends data to the DRE without taking into account the capacity of the DRE to send data over the other network, bottle necks and network congestions could be created. To prevent this from happening, in the exemplary embodiment of the present invention, the service level is automatically negotiated with the DRE. In other words, the DTE received a proposed service

level indicating the level of service that the DRE can provide in communicating the data of the

DTE over the second communications network. As a result, by taking into account the DRE's

constraints and limitations in communicating data over the second network, network congestions

and other problems can be prevented. It will be appreciated that the following remarks relate to

the invention in a general sense, the remarks are not necessarily limitative of any claims and are

intended only to further understanding of the distinguishing aspects of the claim mentioned

above.

C. Chuah's Disclosure

Chuah discloses an enhanced, receiver-driven RSVP based tunneling protocol. In

particular, Chuah discloses a system, which has a sender connected to a tunnel source point

(TSP) via T1/E1 lines, a tunnel destination point (TDP) connected to a receiver via T1/E1 lines.

The TSP transmits data of the sender to the TDP over the Internet using RSVP (tunneling)

protocol, which in turns forwards the data to the receiver (col. 2, lines 8 to 18 and col. 4, lines 13

to 28).

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

The sender sends a RSVP path message, which specifies the characteristics of the sender (Sender Tspec) and parameters subject to the modification by the routers along the path to the receiver (ADSPEC). The TSP receives this message, encapsulates it and transmits it to the TDP. The TDP decapsulates the message, updates the ADSPEC, and forwards the message to the receiver. Chuah's receiver computes the parameters needed for this session and sends back a RSVP RESV message. When the TDP receives this RSVP RESV message, the TDP allocates tunnels for this session and encapsulates the message including the number of tunnels allocated and sends it to the TSP. The TSP decapsulates it and uses the assigned number of tunnels to forward messages between the TDP and the TSP, and forwards the remaining portion of the message upstream to a sender (Figs. 3-5; col. 3, lines 1 to 22 and col. 4, line 50 to col. 5, line 23).

That is, in Chuah, each receiver/sender is capable of sending RSVP PATH message, which contains its own parameters (*i.e.*, the receiver/sender's parameters) and the parameters that may be modified by the TSP or the TDP (col. 3, lines 2 to 20). Moreover, each receiver/sender in response to the RSVP PATH message, can compute amount of bandwidth needed and send a reservation message (RSVP RESV) to request the required bandwidth (col. 4, line 60 to col. 5, line 10). Chuah's TSP/TDP may attach to the RSVP RESV message an appropriate RSVP tunnel for this session and encapsulate the message and send it to another TSP/TDP, which decapsulates the message and uses this appropriate RSVP tunnel (Figs. 3-5 and 11; col. 5, lines 1 to 23). In short, Chuah teaches integrating allocations of bandwidth: one occurring between the sender and the receiver via the TSP and the TDP (conventional RSVP protocol) and one occurring between the TSP and the TDP (Chuah's enhancement to RSVP protocol).

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

D. Examiner's Position

The Examiner alleges that claim 3 is directed to a data transmitting element and is

anticipated by Chuah.

The Examiner asserts that Chuah's disclosure of "a user" or a sender connected via a line

11 to an ISP 15 discloses the DTE, as set forth in claim 3. The Examiner further alleges that

Chuah's ISP 25 (TDP) discloses the DRE, as set forth in claim 3. Specifically, the Examiner

maintains that Chuah's disclosure of the ISP 25 (alleged DRE) sending a TUNNEL RESV

message along with a TUNNEL TSPEC and the specification for the sender (alleged IPCP

message with proposed level of service) computed by the TDP anticipates the subject matter of

claim 3 (see pages 2 and 3 of the Office Action).

E. Chuah does not disclose service level proposal receiving means set forth in claim 3

The Examiner's position in the Final Office Action dated August 11, 2004 appears to be

that Chuah's TSP discloses the service level proposal receiving means set forth in claim 3. In the

Non-Final Office Action dated May 27, 2005, the Examiner's position appears to be that

Chuah's sender discloses the service level proposal receiving means set forth in claim 3.

Appellant respectfully submits that both positions are technically inaccurate, as explained in

greater detail below.

In Chuah, the <u>TSP</u> receives the RSVP RESV message with tunnel binding object and the

TSP uses the assigned tunnels for transmitting data between the TSP and the TDP (col. 5, lines 5

to 12). In other words, Chuah's TSP uses the tunnel binding objects to send data over the

tunnels assigned by the TDP to the TDP and the TSP forwards the remaining portion of the

RSVP RESV message upstream to the sender. The TSP uses only the tunnel assignment

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

assigned by the TDP for transmitting data between the TSP and the TDP. The other portion of the message is sent to the sender. That is, in Chuah, the assigned tunnels relate only to the communication between the TSP and TDP.

In short, Chuah fails to teach or suggest the received service level indicating the service level that the TDP can provide for communicating TSP's data over another network, and notifying the data sending means of this received service level proposal. In other words, the TSP simply receives the tunnels assigned by the TDP and not the service level that the TDP can handle for communicating data over another communications network such as the network between the receiver and the TDP. In Chuah, the TDP determines the appropriate RSVP tunnels and simply sends them to the TSP. The TSP of Chuah has no knowledge of the TDP's capabilities in transmitting data over the another network. Chuah's TSP only receives the assigned tunnels for communication between the TSP and the TDP.

Similarly, *the sender* only receives the remains of the encapsulated message. However, Chuah does not teach or suggest that the remaining portion of the encapsulated message <u>indicates</u> the level of service that the TDP (ISP 25) can provide in communicating data to a receiver <u>over network 21</u> (Fig. 3). In fact, with respect to the remaining portion of the message, Chuah only discloses that the receiver computes <u>the amount of bandwidth based on the sender's specification</u> and sends the RSVP RESV message back to the sender (col. 3, lines 8 to 18 and col. 5, lines 2 to 5). That is, Chuah fails to teach or suggest the sender having a service level proposal receiving means that receives from the TDP a RSVP RESV indicating <u>the service level that the TDP can</u> provide in communicating the data over the network 21.

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

In fact, in Chuah, the TDP only specifies the parameters for the TSP. That is, the TDP does not specify the parameters for the sender. Moreover, it does not teach or suggest specifying the parameters based on the level of service the TDP can handle to communicate data over the network 21. Instead, the parameters are based on the sender specification.

Therefore, "service level proposal receiving means: adapted to receive from said DRE an IPCP message indicating a proposed service level that said DRE can provide for communicating said data of said DTE over said second communications network, and notifying said DSM of said received service level proposal" where "said DRE receives said data of the DTE over said first communication network and transmits said data of the DTE in said second communications network," as set forth in claim 3 is not disclosed by Chuah, which lacks the TSP or the sender receiving a message indicating the proposed service level that <u>DRE can provide</u> for communicating data of the DTE over the second communication network. The TSP of Chuah only receives the tunnel assignment related to a network between the TSP and the TDP and not to another network. Similarly, the sender only receives the remaining of the RSVP_RES message and does not receive the tunnel assignment based on the service level the DRE can provide for communicating data over another network.

In short, Chuah fails to disclose the service level proposal receiving means, which receives an IPCP message indicating a proposed service level that the DRE can provide for communicating the data of the DTE over the second communication network.

F. Chuah does not disclose service level requesting means as set forth in claim 3

Chuah fails to teach or suggest service level proposal requesting means for requesting a

service level for communicating the data of said DTE over said second communication network.

As explained above, in Chuah, the sender sends its specifications/parameters (how much bandwidth it is capable of handling) and in return, receives allocated bandwidth (col. 3, lines 1 to 18, lines 23 to 46). This allocated bandwidth is provided by the receiver, which determines how much bandwidth to allocate to this session. This notification of the allocated bandwidth to the sender is not an indication of the service level that the TDP can provide over the second network, as set forth in claim 3, but rather an indication of tunnels between the TSP and the TDP or the sender and the receiver. That is, the TSP receives the tunnel assignment to be used between the TSP and the TDP, and not for communication over the other network. Tunneling is performed between the TSP and the TDP only (see col. 3, lines 23 to 25). Chuah teaches that a "TUNNEL" prefix is added to the RSVP messages relating to the tunnel in order to distinguish the RSVP messages for the tunnel from those for the end-to-end flows (col. 4, lines 38 to 43).

Moreover, the sender of Chuah just sends its parameters to the receiver, it does not send a proposal for a service level. The service level proposal i.e., a request for a bandwidth allocation is made by the receiver, and the TSP and the sender can determine whether to accept or deny. That is, in Chuah, the receiver computes the parameters needed for the RSVP session and the TDP computes the number of tunnels needed between the TSP and TDP. This proposal is forwarded back to the TSP and the sender, which accept or decline the proposal (Fig. 5; col. 5, lines 1 to 23).

In short, the service level proposal requesting means for requesting a service level for communicating the data of said DTE over said second communication network is not disclosed by Chuah, which lacks having the sender and/or the TSP send a proposal for the service level, as the proposal comes from the TDP and the receiver, and which also lacks having the proposal

relate to the network between the TDP and the receiver. In Chuah, the proposal relates to establishing a connection between the TSP and TDP and the sender and the receiver.

G. Conclusory Remarks for claim 3

Therefore, the service level requesting means and the service level proposal means, as set forth in claim 3, where the DRE receives the data of the DTE over the first communications network and transmits the received data over the second communications network, as also set forth in claim 3 is not disclosed by Chuah. For at least these exemplary reasons, Appellant respectfully submits that independent claim 3 is patentably distinguishable from Chuah. Therefore, Appellant respectfully requests the Board to reverse this rejection.

Н. Claim 5

Next, independent claim 5 recites: "service level negotiating and proposing means, coupled with said service level request reception means, for determining a service level that said DRE can provide for communicating said data of said DTE within said second communications network, based on at least one predetermined criterion and on said requested service level, and formulating, as a service level proposal, an IPCP message indicating said determined service level," where the first network is between the DTE and the DRE and the DRE communicates data of the DTE over the second network.

The Examiner alleges that TSP, TDP, internet, and link between the receiver and the TDP are equivalent to the DTE, the DRE, the first network, and the second network, respectively, as set forth in claim 5.

Chuah, however, only discloses the tunnel assignments for communication between the TSP and the TDP, as such, the TDP does not assign parameters/tunnels for communicating over U.S. Appln. No. 09/384,422

Attorney Docket No.: O55464

a network different from the network between the TSP and the TDP, as set forth in claim 5. In short, the TDP receives the computed parameters needed for the session from the receiver, and executes tunnel assignment for notifying the TSP of the assigned tunnels (Fig. 5, col. 5, lines 1 to 23). Chuah fails to teach or suggest the TDP determining parameters for communicating over the network between the receiver and the TDP, for example. These parameters are determined by the receiver. The TDP assigns tunnels for communicating data between the TSP and the TDP.

In other words, Chuah fails to teach or suggest "service level negotiating and proposing means, coupled with said service level request reception means, for determining a service level that said DRE can provide for communicating said data of said DTE within said second communications network," which lacks determining the service level that DRE can provide for communicating data of the DTE over the second network. For at least these exemplary reasons, Appellant respectfully submits that independent claim 5 patentably distinguishes from Chuah. Therefore, Appellant respectfully requests the Board to reverse this rejection.

Claim 6 I.

With respect to independent claim 6, among a number of unique features not taught by the prior art reference cited by the Examiner, it recites service level negotiating and proposing means, similar to the service level negotiating and proposing means argued above with respect to claim 5. Since claim 6 contains features that are similar to the features argued above with respect to claim 5, those arguments are respectfully submitted to apply with equal force here. For at least substantially the same exemplary reasons, therefore, Appellant respectfully requests the Board to reverse this rejection of independent claim 6.

J. Claim 7

With respect to the independent claim 7, among a number of unique features not taught by the prior art reference cited by the Examiner, recites a service level proposal receiving submodule, similar to the service level proposal receiving means argued above with respect to claim 3. Since claim 7 contains features that are similar to the features argued above with respect to claim 3, those arguments are respectfully submitted to apply with equal force here. For at least substantially the same exemplary reasons, therefore, Appellant respectfully requests the Board to reverse this rejection of independent claim 7.

K. Claims 9-11

With respect to the independent claims 9-11, among a number of unique features not taught by the prior art reference cited by the Examiner, they recite service level negotiating and proposing means, similar to the service level negotiating and proposing means argued above with respect to claim 5. Since claims 9-11 contain features that are similar to the features argued above with respect to claim 5, those arguments are respectfully submitted to apply with equal force here. For at least substantially the same exemplary reasons, therefore, Appellant respectfully requests the Board to reverse this rejection of independent claims 9-11. Claim 12 is patentable at least by virtue of its dependency on claim 11.

In addition, independent claim 11, among a number of unique features recites: "formulating, at said DRE, an Internet Protocol Control Protocol proposal indicating said determined service level." In Chuah, the TDP (alleged DRE) generates the tunnel assignment and includes it into the RSVP RESV message, which the TDP encapsulates. In other words, the TDP only encapsulates the RSVP RESV message and does not generate this message. The TDP

223404

only generates TUNNEL_BINDING object but this object relates to the tunnel assignment between the TDP and the TSP. In other words, Chuah fails to disclose a TDP that would

formulate a proposal indicating the service level for communicating the data of the TSP over the

network between the TDP and the receiver, for example. For at least this additional reason,

Appellant respectfully submits that independent claim 11 patentably distinguishes from Chuah.

L. Claims 13, 14, and 16

Claim 13, 14, and 16 dependent on claim 1 and as such are patentable at least by virtue of their dependency on claim 1. Moreover, claim 14 recites: "wherein said DRE is an access server provider and said second network is an internet network." If, as alleged by the Examiner (see page 3, last four lines), the network between the TDP and receiver (i.e., network 21) is the second network, then clearly Chuah fails to disclose the network 21 being the internet. For at least this additional reason, claim 14 patentably distinguishes from Chuah.

Issue 2: Claim Rejection under 35 U.S.C. § 103(a)

Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Chuah. Claim 4 depends on claim 3. Appellant has already demonstrated that Chuah does not meet all the requirements of independent claim 3. Therefore, claim 4 is patentable at least by virtue of its dependency.

Moreover, claim 4 recites: "service level proposal renegotiating means, coupled between an output terminal of said service level proposal receiving means and an input terminal of said service level requesting means, for generating another IPCP message requesting a service level, different from the proposed service level indicated in said IPCP message from said DRE, in response to an indication that said proposed service level is not a satisfying service level."

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

It is respectfully submitted that in Chuah, the sender and the TSP do <u>not have the</u> renegotiating means but can only accept or deny the proposal (col. 5, lines 9 to 13).

Furthermore, the Examiner alleges that in order to perform the functions, the system disclosed by Chuah must have a plurality of elements, which are interconnected to implement the functions of the system (*see* pages 5-6 of the Office Action). However, Appellant respectfully points out that the Examiner has not indicated how is the particular arrangement of elements as set forth in claim 4 is obvious. There could be other elements or other interconnections to perform the same functionality. In addition, Appellant respectfully submits that the particular arrangement as set forth in claim 4 is not obvious in view of Chuah, which fails to teach or suggest any arrangement of elements for the TSP or the sender. Therefore, Appellant respectfully requests the Board to reverse this rejection of independent claim 4.

U.S. Appln. No. 09/384,422 Attorney Docket No.: Q55464

VIII. CONCLUSION

Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37(a) and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

SUGHRUE MION, PLLC

Telephone: (202) 293-7060 Facsimile: (202) 293-7860

 $\begin{array}{c} \text{washington office} \\ 23373 \\ \text{customer number} \end{array}$

Date: October 31, 2005

Nataliya Dvorson

Registration No. 56,616

Attorney Docket No.: Q55464

CLAIMS APPENDIX

CLAIMS 3-7, 9-14, AND 16 ON APPEAL:

3. A data transmitting element (DTE) to be used for sending data, over a link through a first communications network, towards a data receiving element (DRE) for communication of said data over a second communications network, said DTE comprising:

data sending means (DSM), adapted to send said data towards said DRE;

service level requesting means for generating an Internet Protocol Control Protocol (IPCP) message, for sending to said DRE, requesting a service level for communicating said data of said DTE over said second communications network; and

service level proposal receiving means:

adapted to receive from said DRE an IPCP message indicating a proposed service level that said DRE can provide for communicating said data of said DTE over said second communications network, and

notifying said DSM of said received service level proposal,

wherein said DRE receives said data of the DTE over said first communications network and transmits said received data of the DTE in said second communications network.

4. The DTE according to claim 3, further comprising service level proposal renegotiating means, coupled between an output terminal of said service level proposal receiving means and an input terminal of said service level requesting means, for generating another IPCP message requesting a service level, different from the proposed service level indicated in said IPCP

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

satisfying service level.

5. A data receiving element (DRE), to be used for receiving data from a data transmitting

element (DTE), over a link through a first communications network, and communicating said

message from said DRE, in response to an indication that said proposed service level is not a

data over a second communications network, said DRE comprising:

data receiving means (DRM), adapted to receive said data from said DTE;

service level request reception means for receiving an Internet Protocol Control Protocol

(IPCP) message, from said DTE in said first communications network, said message indicates a

requested service level for said communicating of said data of said DTE over said second

communications network:

service level negotiating and proposing means, coupled with said service level request

reception means, for determining a service level that said DRE can provide for communicating

said data of said DTE within said second communications network, based on at least one

predetermined criterion and on said requested service level, and formulating, as a service level

proposal, an IPCP message indicating said determined service level; and

service level proposal sending means, coupled with said service level negotiating and

proposing means, for sending said IPCP message as said service level proposal.

6. A data receiving element (DRE), to be used for receiving data from a data transmitting

element (DTE), over a link through a first communications network, and communicating said

data over a second communications network, said DRE comprising:

data receiving means (DRM), adapted to receive said data from said DTE in said first communications network:

service level negotiating and proposing means, for determining a service level that said DRE can provide for communicating said data of said DTE within said second communications network, based on at least one predetermined criterion and on said requested service level, and formulating, as a service level proposal, an IPCP message indicating said determined service level; and

service level proposal sending means, coupled with said service level negotiating and proposing means, for sending said IPCP message as said service level proposal.

7. A software module for running on a processing system for inclusion in a data transmitting element (DTE), for sending data, over a link through a first communications network, towards a data receiving element (DRE) for communication of said data over a second communications network, said software module comprising:

a data sending sub-module, adapted to send said data towards said DRE;

a service level requesting sub-module, for generating an Internet Protocol Control Protocol (IPCP) message, for sending to said DRE, requesting a service level for communicating said data of said DTE over said second communications network; and

a service level proposal receiving sub-module:

adapted to receive from said DRE an IPCP message indicating a proposed service level that said DRE can provide for communicating said data of said DTE over said second communications network, and

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

notifying said data sending sub-module of said received service level proposal, wherein said DRE receives said data of the DTE over said first communications network and transmits said received data of the DTE in said second communications networks.

9. A software module for running on a processing system for inclusion in a data receiving element (DRE), for receiving data from a data transmitting element (DTE), over a link through a first communications network, and communicating said data over a second communications network, said software module comprising:

a data receiving sub-module, adapted to receive said data from said DTE;

a service level request reception sub-module, for receiving an Internet Protocol Control Protocol (IPCP) message, from said DTE in said first communications network, said message indicates a requested service level for said communicating of said data of said DTE over said second communications network;

a service level negotiating and proposing sub-module, co-operating with said service level request reception sub-module, for determining a service level that said DRE can provide for communicating said data of said DTE within said second communications network, based on at least one predetermined criterion and on said requested service level, and formulating, as a service level proposal, an IPCP message indicating said determined service level; and

a service level proposal sending sub-module, co-operating with said service level negotiating and proposing sub-module, for sending said IPCP message as said service level proposal.

10. A software module for running on a processing system for inclusion in a data

receiving element (DRE), for receiving data from a data transmitting element (DTE), over a link

through a first communications network, and communicating said data over a second

communications network, said software module comprising:

a data receiving sub-module, adapted to receive said data from said DTE in said first

communications network;

a service level negotiating and proposing sub-module, for determining a service level that

said DRE can provide for communicating said data of said DTE within said second

communications network, based on at least one predetermined criterion and on said requested

service level, and formulating, as a service level proposal, an IPCP message indicating said

determined service level; and

a service level proposal sending sub-module, co-operating with said service level

negotiating and proposing sub-module, for sending said IPCP message as said service level

proposal.

11. A method for data communication, comprising:

setting a level of service for a data transmitting network element (DTE), said DTE being

connected to a data receiving network element (DRE) via a point-to-point connection of a first

communications network, said DRE being connected to a second communications network, said

level of service relating to transporting data between said DTE and said second communications

network via said DRE, wherein said level of service is set by:

determining, at said DRE, a service level that said DRE can provide for communicating said data of said DTE with said second communications network, based on at least one

predetermined criterion;

formulating, at said DRE, an Internet Protocol Control Protocol proposal indicating said

determined service level;

sending said Internet Protocol Control Protocol proposal to said DTE; and

receiving said Internet Protocol Control Protocol proposal at said DTE; and then

transporting said data between said DTE and said second communications network via

said DRE according to said level of service indicated in said Internet Protocol Control Protocol

proposal.

12. The method for data communication as set forth in claim 11, further comprising:

before said determining of said service level at said DRE:

sending, from said DTE to said DRE, an Internet Protocol Control Protocol request

indicating a requested level of service; and

receiving at said DRE said Internet Protocol Control Protocol service level request sent

from said DTE;

wherein said determining of said service level at said DRE is based also on said requested

level of service of said DTE.

13. The DTE according to claim 1, wherein said DTE is a user terminal and said DRE is

an edge element of said second network.

U.S. Appln. No. 09/384,422

Attorney Docket No.: Q55464

14. The DTE according to claim 13, wherein said DRE is an access server provider and

said second network is an internet network.

16. The DTE according to claim 1, further comprising generating means for generating

data for transmission wherein the DTE is an element creating said data for transmission.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37 U.S. Appln. No. 09/384,422 Attorney Docket No.: Q55464

EVIDENCE APPENDIX:

NONE.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37 U.S. Appln. No. 09/384,422 Attorney Docket No.: Q55464

RELATED PROCEEDINGS APPENDIX

NONE.